


UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN
STACKS



Digitized by the Internet Archive
in 2011 with funding from
University of Illinois Urbana-Champaign

<http://www.archive.org/details/evaluationofeffi82coop>

330
B385
no. 82
cop. 2

411-72

Faculty Working Papers

AN EVALUATION OF THE EFFICACY OF THE
FEDERAL INTEREST-SUBSIDY HOUSING PROGRAMS

James R. Cooper

#82

College of Commerce and Business Administration
University of Illinois at Urbana-Champaign



FACULTY WORKING PAPERS

College of Commerce and Business Administration

University of Illinois at Urbana-Champaign

February 16, 1973

AN EVALUATION OF THE EFFICACY OF THE
FEDERAL INTEREST-SUBSIDY HOUSING PROGRAMS

James R. Cooper

#82

AN EVALUATION OF THE EFFICACY OF THE
FEDERAL INTEREST-SUBSIDY HOUSING PROGRAMS

INTRODUCTION

The purpose of this paper is to provide historical documentation on the relative efficiency of the Sec. 235 (Sales) and Sec. 236 (Rental) housing programs. While the research was in progress it was hoped it would be a progress report on the efficiency of those programs. Now that HUD-FHA has been directed to suspend new mortgage commitments on these programs, pending investigation, it appears the study, though timely, will serve a different purpose.

We wish to emphasize that this financial analysis constitutes applied research in the area of political-economic studies. These housing programs constitute a form of governmental intervention in the marketplace which makes the methodology of economic theory somewhat inappropriate. One is forced to consider not only economic feasibility but also political acceptability because housing subsidy programs are per se a rejection of the orthodox definitions of housing demand. This point is discussed later in the article. We seek in this article to consider not only the beneficial effects of achieving production goals, but also to weigh the costs of deleterious side effects such as an overloading of FHA managerial capacity, the costs of foreclosures which have occurred, and other matters.

An Overview of Housing Subsidies - Past and Present

Since 1937 the federal government has invested billions of dollars in direct housing subsidies. Until the 1960s these subsidies were primarily

limited to the poor of low-income families through public housing authorities. During the 1960s, concern for millions of families living in deteriorated, even delapidated, housing caused the nation to experiment with BMIR (below market-interest rate) programs designed to provide eligible low-moderate income families with assistance to lower their shelter costs and raise the quality of housing they occupied. Ultimately, in 1968 our Congress dedicated the nation to a ten-year program designed to provide for the construction and rehabilitation of six million subsidized dwelling units and a stabilized construction of twenty million unsubsidized units in the decade of 1968-1978. Two new interest subsidy programs were created, Sec. 235 for sales housing and Sec. 236 for rental housing designed to produce 3,065,000 units. Under Secretary Romney, a former auto production executive, we embarked on an unprecedented effort to build housing at annual levels of production never before achieved. The success of the HUD program in achieving three successive years of over two million housing starts is remarkable. Hud-Subsidized Housing Production played an important but minor role. Total production of conventional dwelling units was 2,083,200 for 1971. Recognizing the importance of mobile homes, we should add 491,700 mobile home units for a total production of 2,544,500 for calendar year 1971. Total HUD-subsidized production for the year was 349,320 units or 13.77 percent.¹ It will be quite instructive to see a table showing a breakdown of fiscal 1972 production:

Table 1

HUD - Subsidized Production for Fiscal Year 1972

<u>Total</u>	<u>Sec. 235</u>	<u>Public Housing</u>	<u>Sec. 236</u>	<u>Sec. 235 1-4 Rehab</u>	<u>Sec. 236 Multi-Fam. Rehab</u>	<u>Other</u>
18,469	111,293	51,902	101,875	13,554	18,032	*41,813

Source: Department of Housing and Urban Development-Housing Production and Mortgage Credit-FHA-Division of Research and Statistics Revised 11/30/72
These units are all new dwelling units, primarily under state uninsured project programs.

You will note that in spite of the ambitious goals concerning rehabilitation set forth in our national housing goals that rehabilitation is relatively insignificant, constituting 28,586 units, a mere 8.43 percent of the total. It may be helpful to note that the production of various forms of subsidized housing during fiscal year 1972 was nearly triple the subsidized housing starts for all years combined up to 1967, the year before we embarked on this goal-oriented program. Such extraordinary success at achieving production goals in the social and political milieu of our American cities has its price. In some cities extraordinary inefficiencies in underwriting and appraisal practices, particularly in Sec. 235 and Sec. 236 rehabilitated housing (8.4 percent of the total) brought on indictments for bribery and scandal. Because the social philosophy of some causes them to have a low tolerance level for subsidized housing, they were quick to attack the subsidy programs as unworkable.

Characteristics of Sec. 235 (Sales) and Sec. 236 (Rental) Programs

There is a general lack of understanding of these interest subsidy programs, not only on the part of the public, but also among the intellectual class. This concern has arisen from the indiscriminate recent adverse publicity

for all the government-assisted housing programs. The newspaper and journal articles have been misleading. Unfortunately, it appears that this fallacious information may well be the basis of program termination. To emphasize this point, we call to your attention the many reports of numerous HUD-FHA foreclosures in several cities (e.g. Detroit). In fact, there are relatively few failures under either the Sec. 235 or Sec. 236 programs per se. Oakley Hunter, president and chairman of the board of FNMA reported the FNMA experience, for example, has been satisfactory, "Of the 1.2 million mortgages we own covering 1-4 family dwellings, approximately 156,000 are in Sec. 235 houses. Of those 156,000 less than 2 percent are in foreclosures, 8.8 percent are delinquent 30 days, 2.4 percent are delinquent 60 days, and 1.3 percent are delinquent 90 days or more." In an effort to provide the reader with a better familiarity with these important socially-motivated programs, we have set forth a description of the Sec. 235 and Sec. 236 programs and some statistical tables detailing their characteristics.

Section 235 is a plan to subsidize the interest on FHA-insured mortgages for dwellings constructed under the minimum property standards of the Section 203 FHA single-family dwelling program. The program also covers cooperative housing projects. The plan is to help lower-income families purchase their own homes (or shares in cooperatives) by providing federal subsidies which are generally the difference between 20 percent of a family's monthly income and the required monthly payment for principal, interest, taxes, and insurance. The effect is to reduce mortgage amortization costs to the borrower--to as little as 1 percent--while allowing the lender the competitive rate of return prevailing for mortgages on the open market.

Section 236 is a companion program which subsidizes the rental of multi-family apartments. Non-profit and limited distribution sponsors of such housing will receive federal funds to pay interest costs of privately financed mortgages in excess of the rate of 1 percent per annum. In return, the sponsors must pass the savings realized from this subsidy on to their tenants, who are to be charged a basic rent not exceeding 25 percent of their monthly incomes. Our studies have shown that the neediest 17 percent of our population will not be able to afford even this new housing without a rent supplement program. According to HUD's calculations, Section 235 is meant for families with a 1969 family income (after certain exemptions) ranging from \$3,800 to \$5,200 per annum in most localities. Section 236 appears to be intended to serve those with 1969 family incomes ranging from \$3,500 to \$7,300. We should point out that these calculations were based on mortgage interest rates and construction costs prevailing in 1968; and the minimum incomes for eligibility are already higher. Since it is well established that families with incomes of less than \$3,500 per year pay 30 to 35 percent of their income for rent, it is indisputable that these interest subsidy programs are no substitute for low-rent public housing, leased housing, Section 23 rent certificates, rent supplements, or some form of subsidy for those below the threshold of eligibility for the Section 235 and Section 236 programs.

Though a more detailed discussion of owner-tenant eligibility and the formulae used to determine the subsidy may be desirable, space limitations preclude such a discussion. Such information has already been published.² Because few are aware that Sec. 235 and Sec. 236 housing has resulted in new

housing with 30 percent lower costs than the regular FHA-insurance programs; and that the percentage of foreclosure on the interest-subsidized dwelling units is about 2 percent--a 98 percent success rate--we have set forth below some comparative data to enable the reader to review the facts.

Table 2

COMPARATIVE CHARACTERISTICS OF NEW DWELLING UNITS
BUILT UNDER THE SAME MINIMUM PROPERTY STANDARDS
I - Section 235-Single-family Sales Housing (Subsidized)*
II - Section 203(b)-Single-family Sale Housing (Unsubsidized)*
(Data represents the Median User and Sales Unit)

<u>Characteristics</u>	SECTION <u>235 (Subsidized)</u>	SECTION <u>203 (b) (Unsubsidized)</u>
Sales price	\$18,218	\$23,813
Living space	1,050 sq. ft.	1,223 sq. ft.
Lot size	9,586 sq. ft.	7,459 sq. ft.
Detached units	95%	91.6%
Age of family head	29 years	30.1 years
Monthly subsidy	\$76	None
Gross annual income	\$6,297	\$13,487
Income, re-certification (no longer taking subsidy)	6.8%	----

*.In HUD statistics a single family house is defined to include owner occupied 1-4 family structures. This data represents single family structures only.

Source: HUD, Profile of Homeowners, (235) 3rd Quarter 1971; FHA Trends 2nd Quarter 1971.

A similar comparison of the regular HUD-FHA multifamily program (Section 207) with the HUD multifamily interest subsidy program (Sec. 236) should prove helpful:

Table 3

COMPARATIVE CHARACTERISTICS OF NEW DWELLING UNITS
BUILT UNDER THE SAME MINIMUM PROPERTY STANDARDS
I - Section 236-Multi-family unit-rental housing-(Subsidized)
II - Section 207-Multi-family unit-rental housing-(Unsubsidized)
(Data represents the Median tenant and median rental unit)

<u>Characteristics</u>	<u>Section 236 Multifamily</u>	<u>Section 207 Multifamily</u>
Project size in units (median)	98.6	133.3
Dwelling units (by structure type) median		
Walk-up	87.7%	63.4%
Elevator	10.8%	30.8%
One-family	1.5%	---
Median mortgage amount per unit	\$14,975	\$15,172
Median rent per unit	\$138.80 (basic)	\$227.24
Average bedrooms per unit	2.1	1.6
Average price of land per dwelling unit	\$830	\$1,082
Median square feet per unit	815	915.3
Foreclosures (and assignments) as a percent of insurance in force at beginning of year	1.59%	0.63%
Annual gross income	\$4,900	NA
Monthly Subsidy	\$85	None
Age of family head	27	NA

NOTE: All figures are from 1970 with the exception of default termination figures which are preliminary figures for 1971. Annual gross income, monthly subsidy, and age of family heads as of March 1971.

SOURCE: 1970 HUD Statistical Yearbook, pages 239 and 244.

Current Foreclosure Rates

In view of the fact that the mass media, congress, and even the current HUD have given us the impression that the interest subsidy programs are resulting in foreclosures at a phenomenal and unbearable rate it is necessary to look at the actual data. We have set forth below the available quarterly data on Section 235 foreclosure rates. Keep in mind that a foreclosure is not a 100 percent loss. It is a foreclosure on a primary lien with the right to a first claim against the proceeds at the public sale of the collateral (i.e. land and improvements) which were pledged as security. In other words, the loss sustained on the units foreclosed will be minimized. Furthermore, all these units are a part of the FHA Special Risk Insurance pool, and are insured against the risk of actual loss. Therefore, though this mutual insurance fund will experience a loss representing the difference between the proceeds of the public sale and the remaining balance of the mortgage, the taxpayer will probably experience no loss whatsoever. We wish to acknowledge that the foreclosure rate indicated is considerably higher than that experienced under conventional mortgages; however, these programs constitute social experimentation in authorizing loans to a user-class with which underwriters have little experience. Further many of the new occupants have little experience with the use of credit and with property ownership responsibilities. It is for that reason it is felt that the success rate of about 98 percent must be viewed, preliminarily, as a success.

SECTION 235 FORECLOSURE RATE

As a percent of insurance in force at beginning
of year (by month) 1970-71

	<u>1970</u>	<u>1971</u>	<u>1972</u>
Jan.	.78%	1.43%	1.92%
Apr.	.46	1.56	
June	1.67	2.19	
Sep.	1.38	1.65	
Dec.	1.49	2.02	

SOURCE: HUD, FHA Division of Research and Statistics,
Statistical Sheet R-R S-390-H

In view of the data set forth above it is apparent that an objective evaluation of the efficacy of these programs is timely. It is believed that this study demonstrates the interest-subsidy programs are efficacious and should be continued during the time their administration is improved and refined.

The Problem of Political Acceptability

Speaking in terms of the political acceptability of these programs, leading business journals have been extremely critical of subsidized housing.³ George Romney, former Secretary of HUD, sounded a warning that housing subsidies were soaring and could exceed \$200 billion!⁴ In retirement the naive, well-meaning Romney continues his opposition to this method of stimulating housing production in the low-to-low-moderate income housing market. Some scholars have added their voice contending that the interest subsidy programs have

probably increased over-all housing construction costs (and the costs of subsidy) by as much as 25 percent over the ordinary rate of increase.⁵ All this opposition to the use of the interest-subsidy programs has been aided and abetted by the hoary traditional view of economic demand for housing expressed by Renshaw recently when he considered the demand for housing in the Mid-1970s. Renshaw stated, "...Poor families, as a general rule, cannot afford new housing..."⁶ This concept of housing demand is a product of the theoretical economist's distinction between "effective demand" on the one hand, and "need" or "non-economic demand" on the other. Effective demand is defined as market-place demand, purchases which consumers have both the desire and the economic means to make. While, "need" represents a judgment independent of the marketplace.⁷ The inappropriateness of the theoretical economist's definition should be obvious to anyone knowledgeable in the area of housing. Our society long ago chose to act with governmental intervention in dealing with the socio-economic and political problems of shelter. The provision and use of housing is carried out in a marketplace significantly distorted by many disparate governmental policies. We have chosen the goal of, "...a decent home and a suitable living environment for every American family...",⁸ precisely because a dwelling unit is more than a mere economic good which satisfies non-pecuniary needs. The housing deficit which prompted the creation of the interest subsidy programs has been well documented elsewhere.⁹ In an earlier research report this writer examined the many economic, social, and political forces which affect the efficient production of housing toward meeting our national housing goals. The report gave careful consideration to land, labor, materials, interim financing costs, mortgage credit

availability, the probable level of interest rates, and other factors as to how they would affect the reallocation of resources necessary to meet the housing goals.¹⁰ Therefore, we will not discuss these matters here. Krissof and others have considered our federal housing policies and their relationship to the variously defined process of "filtering."¹¹ In spite of the attempt of scholars¹² to lay to rest the dubious theory of "filtering" the mass media keeps it alive as the alleged effective panacea to our social problem of "housing needs." As recently as November 20, 1972 the editors of the Wall Street Journal stated, "...the great majority of low-income families rely on the private market for housing. Their shelter is upgraded by occupancy of housing vacated by upwardly mobile families."¹³

The federal interest-subsidy programs were enacted for the direct purpose of stimulating the production of new housing nearer the bottom of the filtering chain, than a surplus production of luxury housing with the hope that it would accelerate the exodus of sub-standard housing from the stock. In order to do so the programs must produce new construction which will provide wider choice and better buys for the sub-market affected (low- to low-moderate-income families in the area). It is an established fact that the homebuilding industry has not produced a significant quantity of new dwelling units selling for less than \$18,000 for over a decade. We have been dependent on the mobile home industry for new dwelling units which low- to low-moderate-income families can afford to purchase according to underwriting standards. The only other supply available has been the existing housing stock which has deteriorated faster in quality than it has lowered in rent price. Lack of code compliance activity, low vacancy levels, oscillating mortgage credit,

etc., have all worked together to cause an observed social problem. The existence of "housing deficit" families is a result of the failure of filtering. These are families who are in the low- and low-moderate-income brackets. Their relative ability to pay forces many of them to purchase housing which is deteriorated and too often below code standards of livability. As stated by Ratcliff, "Filtering...is not a controllable device. The end product of filtering at the bottom of the chain reaction is sub-standard housing, thus filtering produces the very blight which we seek to remedy."¹⁴ Another social problem which lurks within the "filtering" theory fomented by economic theorists, is the long time-horizon necessary to move a dwelling unit down the chain of value so it is available to our low- to low-moderate-income families. Though very little work has been done in this area it appears that the time-period necessary to bring price down to the level affordable by families at the bottom exceeds two generations. In such a time span (40-50 years) the process of ordinary fair, wear, tear, and aging may bring about incurable physical deterioration and probably functional obsolescence. This would probably cause a quality rating of below minimum property standards. Keep in mind that this ignores the effects of neighborhood depreciation in value brought about by neighborhood change.¹⁵ We have emphasized this point because since 1968 70.0 percent of the new one-four family dwelling units have been sold for \$20,000 or more. The median selling price of new housing has not gone below \$24,700 since 1968. It appears clear that in spite of social opposition and strong support of the 'trickle-down' filtering theory this nation did chose to intervene at a different and lower point on the calibrated scale of filtering. They

chose the interest subsidy program to produce housing for families in the annual income range of \$4,600 - \$15,000. We were simply attempting to shorten the time that it took for better quality housing to 'filter' down to the bottom level. In addition, it was hoped that by increasing the supply of housing available to our low- to low-moderate-income families the competitive affect would be to exert downward pressure on rents and prices in the relevant sub-market. This expansion of supply at the lower end of the scale was to find its release of pressure by accelerating demolition of blighted and delapidated dwellings. It now appears that new mortgage commitments under the Sec. 235 and Sec. 236 interest-subsidy programs shall be suspended for a period of eighteen months by the Office of Management and Budget ostensibly to provide HUD with sufficient time to decide whether subsidizing housing is worth the cost. Assistant-Secretary Norman Watson of HUD states, "...HUD represents a social area that is out of step with the White House, there always was that sense of getting out of hand, of being out of step with the politics, of being unable to communicate...In this particular job (i.e. housing managment) there is no way you can look good. The more housing you build, the more it will cost in operating subsidies, the more exposure there is to defaults, foreclosures, and scandals. The White House looks at costs, defaults, foreclosures and scandals."¹⁶ It is the position of this paper that politically inspired rhetoric has taken the place of research. Indifference to the facts has replaced fair investigation. For example, Breckenfeld quotes unidentified HUD officials as predicting that the annual cash costs of subsidies will rise to about \$7.5 billion a year by 1978, and that the subsidies could reach \$200 billion before the loans on the projects are retired. It is

important to note that Breckenfeld's article has been cited as the authoritative source by the plethora of clamorous articles which followed. Indeed, a scholarly journal reprinted Breckenfeld's polemical statement (which called for the White House to impound funds already appropriated).¹⁷

Yet, our own investigation of the interest subsidy programs indicates beyond a reasonable doubt that the interest subsidy programs' annual cash costs will not exceed \$2,091 billion in 1978 which is the highest possible year and that the total costs will not exceed \$18,789 billion dollars over the entire subsidy period which it is estimated will end, under present law, in 1992. Clearly the use of federal financial aid for housing has great difficulty maintaining an acceptable political image because of the tactics of those who oppose. It is the purpose of this paper to provide the results of an exhaustive computer analysis of the probable costs of the interest-subsidy programs to the federal government. The facts will make it clear that those who have believed the analysis of the articles cited have been misled.

The real tragedy is that our 'housing deficit' families will pay the social costs; due to the probable discontinuance of these relatively new programs which are still in their early years of development. Because the 1973 turnover in personnel at HUD brings in staff unaware of what has gone on before, it appears the nation will repeat its past error of discarding existing low- to low-moderate-housing programs which are efficacious while turning to experimental new forms of subsidy as though they are the definitive answer. During the 1960s we had Sec. 221(d) (3), Sec. 231, and Sec. 202. In spite of congressional skimping on appropriations, and HHFA (now HUD) delays

in setting up procedures, developers were finally convinced the programs were functional and here to stay. As a result nearly 70 percent of the units built under those programs were built at the end of the decade. However, when meaningful levels of production were finally achieved the programs were phased out and replaced by the more fashionable interest subsidy programs. Any experienced real estate developer knows that the long time-horizon necessary for budgeting a large housing project requires much more predictable bureaucratic actions. It is not only frustrating but even unwise to embark on the FHA-HUD pre-application feasibility studies knowing the rules will change or the program be terminated or suspended during your pre-planning stage. In view of the 'on-again' and 'off-again' history it appears that whatever form the programs do take strong incentives will be necessary to persuade skilled developers to continue to participate in the production process necessary to supply the needed dwelling units. This is because their profits are higher in other types of development without controls. Keep in mind that writers such as Schussheim have indicated a major constraint on the production of new housing for low-moderate income families has been the limited number of qualified sponsors.¹⁸ Even if we turn to housing allowance vouchers we will still be dependent on skilled developers to produce the necessary new units, unless we are willing to consider the possibility that housing allowances will be used to pay for substandard housing. Such folly would, of course, set us on another round of defaults, foreclosures, and scandals. It appears clear that program continuity is a worthy objective in view of the frustrating inefficiencies that result from changing to new programs because they seem

more politically acceptable at the moment. It is advocated here that though there have been very serious managerial problems during the "start-up" years of the interest-subsidy programs those same problems of managerial efficiency would be implicit in any program involving welfare transfer payments to provide decent housing for our low- to low-moderate-income families. More important, it appears that many of the alternatives (e.g. housing allowances) may not act as an adequate incentive on the supply-side of the housing equation to bring about the production of standard housing in the low- to low-moderate-income housing market. Filtering from the high-moderate and luxury market down to the lower income levels has already been rejected by this article because its glacial movement is rated unacceptably slow and inefficient. The imperfect marketplace's failure to perform adequately has caused us to turn to government intervention which also works with imperfections. It is desirable for us to take a close look at the imperfections resulting from the use of the interest-subsidy programs to consider whether or not they can be overcome, or, do these imperfections produce costs which require termination of the Sec. 235 and Sec. 236 programs. It will also prove worthwhile to consider the more obvious drawbacks which are implicit in other programs which have loyal adherents, though they are largely untested, the negative income tax and housing allowance programs.

Testing the Tolerance Level of our Imperfect Housing Programs

Serious and costly side-effects have arisen in both the Sec. 235 (Sales) housing program and the Sec. 236 (multi-family rental) housing programs.

In Sec. 235 housing we have had five basic problems. First, site availability for new construction has been limited to: 1) new subdivisions on the urban fringes of our metropolitan areas where most of this housing has been built; 2) scattered sites in the inner city areas, many times in deteriorated neighborhoods. Second, it has been alleged that in too many of our major cities the FHA underwriting standards have been lax and even subject to bribery and fraud. Third, the appraising of existing and rehabilitated units offered for FHA insurance has been often incompetent and sometimes dishonest. Fourth, sometimes the new class of owner-occupants, due to a lack of a heritage of experience in buying homes, have purchased properties which failed to meet code standards (often depending on a naive belief that a FHA sale was in some way guaranteed by the federal government to be of merchantable quality). Fifth, it has been alleged that the cost of the subsidy to the tax payer will be so large that the program has already proven unworkable. Taking each of these so-called basic problems in their turn let us consider whether they are caused by the nature of the interest subsidy program, and whether they are a minimal economic cost which we should bear because the benefits of producing the additional low- to low-moderate-housing units far outweighs these costs.

Site Selection Problems

First, the problem of sufficiency in site availability for single-family housing in our large metropolitan areas is a nation-wide socio-political problem unrelated to the interest-subsidy programs. We seek sites which will provide decent, safe, and sanitary housing within the financial

means of the occupants, and at convenient locations. Since many of the would-be occupants are non-white minority families, elderly with low incomes, and lower skill workers, it should be obvious that regardless of the program adopted the problem of obtaining sites convenient to the journey to work, shopping, etc. are more a result of class separation, and the movement of industry which has occurred in the past twenty years, than any housing subsidy program. Since this problem has been adequately discussed elsewhere¹⁹ we will treat it as a given that this is not a cost of the interest-subsidy programs. We add the comment that if all aids to low- to low-moderate-income families were suspended this problem would not go away.

The other problem of site availability concerns the use of scattered sites in the inner city for new housing. It is impossible to ignore that placing a new unit in a neighborhood which has deteriorated; where the municipal infrastructure is poorly maintained and aged; where police and fire protection along with garbage protection are below the per capita cost standards of newer neighborhood; is a risky enterprise. It has been urged that the new construction along with other HUD-aids may result in a reversal of the trends and bring on a wave of rehabilitation and conservation. Certainly, it would seem that the government with its broad-base is the appropriate lender of last resort for such a risky enterprise. However, these efforts at neighborhood rejuvenation should not be thought of as the interest subsidy programs. In fact, they are actually a result of another congressional statute which modified HUD-FHA underwriting standards, Sec. 223(e).

Sec. 223(e)--The Deteriorated Neighborhood Mortgage Program

Though Sec. 223(e) is not an interest-subsidy program, nor, was it intended to result in subsidy to the owner-occupants, it is necessary to comment on Sec. 223(e) mortgages because many writers have confused them with our subsidy programs.

As a result of congressional concern over the FHA practice of "red-lining" certain neighborhoods as unacceptable "high-risk" areas, congress attempted to modify this practice in the 1968 Housing and Urban Development Act. The motives were commendable for "red-lining" had resulted in non-white racial discrimination in our major cities because blacks, spanish-americans, etc. tended to be crowded into these "unacceptable risk" neighborhoods. However, Sec. 223(e) placed a burden on FHA underwriting personnel which may have been too difficult to meet. A close reading of the statutory language is in order:

"...the Secretary is authorized upon application by the mortgagee to insure under any section of this title (i.e. all FHA mortgage programs) a mortgage executed in connection with the repair, rehabilitation, construction, or purchase of property located in an older, declining urban area in which conditions are such that one or more of the eligibility requirements applicable to the section or title (i.e. programs such as 203, 235, 207, and 236, etc.) under which the insurance is sought could not be met, if the Secretary finds that (1) the area is reasonably viable, giving consideration to the need for providing adequate housing or group practice facilities for families of low and moderate income housing in such area, and (2) the property is an acceptable risk in view of such consideration.

The insurance of a mortgage pursuant to this subsection shall be the obligation of the Special Risk Insurance Fund. (See Sec. 238.) (Underlining and paranthetical information supplied by the writer.)"²⁰

This congressional response to the inner-city riots of 1967 must have been bewildering to the HUD-FHA underwriters and ranking officers. They were being directed to accept risks that would otherwise be rejected in neighborhoods which were rated "high-risk" because physical deterioration was already eroding property values. Under Sec. 223(e) conventional underwriting risk evaluation standards such as: credit characteristics of the applicant; degree of motivation toward ownership; loan-to-value ratio (i.e. of the down payment); adequacy of income; stability of income; adequacy of income in relation to all monetary obligations; were all to be waived to some extent. In the meanwhile Congress provided a beginning appropriation of \$20,000,000 to start the revolving fund necessary to pay losses which in theory were to be covered by the FHA insurance premium charges of $\frac{1}{2}$ percent on the remaining balance of the mortgages all of which were to be out of the Special Risk Insurance Fund. To waive the above underwriting standards along with requiring the FHA to insure in these "older declining areas" was to attempt to repeal immutable economic laws. To require HUD area directors to make a determination that: -"the area is reasonably viable"- when our best urban planners and urban economists have been unable to make such determinations for selecting urban renewal project areas, was astonishing. It is not surprising that FHA underwriting personnel throughout the country felt Congress had issued a \$20,000,000 first installment on a "blank-check," issued for political and social reasons which defied

economic good sense. Because the Sec. 223(e) losses are charged against the same Special Risk Fund as the Sec. 235, Sec. 236, Sec. 233, and Sec. 237 programs it has resulted in Special Risk Fund Losses which are used as an indication of the failure of our low- to low-moderate-income housing programs. It should be obvious that Sec. 223(e) losses are unrelated to losses resulting from ordinary mortgages insured under the Sec. 235 and Sec. 236 interest-subsidy programs which are the subject of this paper. Though the mandate of the Sec. 223(e) directive has resulted in some financial disaster in the financing of existing and rehabilitation housing in inner city neighborhoods of our major cities it is a gross misrepresentation to attribute this to the theory or practice of the interest subsidy programs. However, it is true that the introduction of Sec. 235 which paralleled the regular Sec. 203 program, along with Sec. 236 which paralleled the regular Sec. 207 program did cause some confused thinking among certain "old-line" senior HUD-FHA officials. This was because some FHA underwriters had difficulty wearing two hats, one, for the regular profit-motivated programs (Sec. 203 and 207); and another for our socially-motivated programs (Sec. 235 and Sec. 236) in which rents were to be controlled; income of eligible families was to be regulated; and construction standards were to be modest to keep costs down. The difference in criteria for evaluation of applicants continues to be a problem. Some have seriously suggested we must separate the regular sales and profit-motivated programs from those which are seeking to achieve social goals because of the inflexibility of the underwriting personnel.

Underwriting Problems

This leads us to our second problem the extent of lax underwriting standards in our Sec. 235 and Sec. 236 programs. Whatever the case may be, it is clear that ordinary applicants under these programs continue to meet the same standards for ability-to-pay (with the subsidy, of course) as applicants have for decades. Determination of adequacy of income, stability of income, moral risk, health, occupation, local economic conditions, etc. are necessary considerations in measuring the quality of a loan-insurance risk. On the other hand, the failure to develop standards for evaluating the risk implicit in loaning to eligible occupants under the Sec. 223(e) and Sec. 237 programs cannot be excused. Since such loans were often character loans; references should have been investigated; rent-payment records investigated, credit records considered; i.e. the risk evaluation practices long ago developed in the small loan companies for signature loans could have been adopted and modified. Simply because that program opened the door to a new kind of borrower was no reason for assuming there were to be no standards of acceptability. It is of interest to note that Lawrence Katz, HUD Director of the Milwaukee office, clearly demonstrated that good underwriting practices, ethical appraising, and orientation of the owners to their responsibilities could result in low delinquency and default rates. Under the pressure of the unprecedented volume brought about by Sec. 223(e), we should not be surprised if laxity occurred in other application reviews. Actually there was an all time record volume for all FHA-insurance programs combined, a particularly high increase in 1969 and 1970. However, we can

look to more than mere statistics to understand why underwriting and appraising practices slipped in quality. There was a freeze, and even a reduction, in staffing required at the same time work loads were increasing at this unprecedented rate. HUD-FHA was pressed through a massive reorganization, which will probably be beneficial in the long-run, however, in the meanwhile the greatly overloaded staff was required to move their physical plant to new quarters in most cities, thousands of applications were temporarily lost. Again this problem of managerial efficiency can not be attributed to the nature or impact of the interest-subsidy programs.

The third problem considered is largely in appraisal practices. Historically, anytime mortgage funds became abundant there has been an unfortunate tendency for real estate financing to be willing to bear higher loan-to-value ratios and condone nonchalant appraisal practices. The period from 1970-1973 has been no exception. Hopefully the glare of publicity on the sloppy appraising practices of FHA, during this time of heavy pressure on their personnel, will force the nation to realize we need an appraisal profession with the power to enforce a code of ethics on its membership. The HLBB has made a major step in a recent directive which discourages the unfortunate past practice of savings and loan associations using their board of directors for "committee appraisal" of properties offered for loan collateral. The ideal answer is to require values to be established by professional fee appraisers of proven expert qualifications. Unfortunately, the number of members of the Appraisal Institute (MAIs) and members of the Society of Real Estate Appraisers (SREAs) is small in relation to the number who would be

needed under such a rule. However, it is believed that given an affirmative policy decision by the various governmental agencies favoring independent, expert, ethical fee-appraising we would see a quick market response resulting in new entrants to the vocation-profession. In the meanwhile, we must remain dependent upon HUD auditors, GAO investigations, and the Justice Department to force responsible appraising practices under the threat of criminal indictment.

It appears certain that the vast majority of the defaults will return substantial monies from the public sales of the collateral. It is instructive to note that virtually all the defaults which will result in a high percentage loss to the mutual insurance pool are in deteriorated neighborhoods where the risk of erosion of value (due to continuing decline of the environs) was highly probable. Before going on to the next problem, we wish to emphasize that a demoralizing injustice will result from indiscriminate blanket accusation of all FHA-HUD personnel involved. The professionals who have worked under the stigma of recent scandals must be assured the public recognizes their value or the government will lose them to private practice. It is hoped the new HUD administration will recognize the need for a cadre who will provide the necessary continuity to achieve improved appraisal methods.

Insured Properties and Code Compliance Faults

The fourth problem to be considered arises from the fact that some of the properties insured under various FHA programs were in violation of local housing, plumbing, fire, electrical, and other code requirements. Further, some had inoperable mechanical equipment, leaking roofs, etc. Unfortunately,

the purchasers seem to have been lulled into a false sense of security because it was an FHA "guaranteed" purchase. This is in spite of the fact the FHA insurance had no relationship to the risks of habitable condition. Historically, real estate transactions have followed the well settled rule of "caveat emptor," with the seller making no warranties as to fitness for purpose intended or fair average quality. However, it is clear that in the case of the new class of buyers covered by the interest-subsidy programs and Sec. 223(e) they were in need of aid in selection of their new homes. In retrospect it seems obvious that inspection by persons qualified to determine sound physical condition was a necessity. We call to your attention that an ethical appraiser though qualified to determine fair market value does not represent himself as an expert on structural, mechanical, or safety conditions. Clearly, especially in existing housing there was a need for an expert such as an architect, engineer, building contractor, or experienced artisan, to actually inspect the premises to determine the soundness of the physical structure and improvements. Much of the scandal and alleged corruption emanated from the deceitful practice of sellers who would disguise and cover up defects in the property with cosmetic work which was misrepresented as a rehabilitation. Since we are speaking of the discovery of fraud it should be obvious that expert inspection was necessary. It is of great importance to note that many HUD-FHA regional offices belatedly did add this inspection function to the application review process. It appears such personnel is available on a fee basis from among older and semi-retired building trades members as well as the professions noted. It would seem that a fair fee should be paid by the buyer

out of mortgage proceeds to determine: 1) fair market value and sound loan value, and 2) sound physical condition, and the absence of significant code violations. It would seem to be an excellent form of insurance against the reality of a market in which fraudulent sellers exist. It is clear that the author believes these very real problems implicit in the art of appraising and the underwriting decision are manageable and that costs can be minimized. It is now time to comment on the costs to the interest subsidy programs resulting from the unfortunate overloading of the FHA underwriting and valuation personnel as well as the dishonesty which has resulted in the foreclosure of undesirable properties.

This may be one of the most important paragraphs in the article, because the facts revealed the measurable trend of losses appear manageable. Except for 223(e) most of the losses are in rehabilitated housing. As previously noted rehabilitation of existing housing constitutes a very low percentage of the Sec. 235 or Sec. 236 subsidized housing. For example as of November 1970 only 24 projects consisting of 163 rehabilitated units had been insured under the Sec. 235 rehabilitation program. Looking at more recent statistics we find that of the 204,454 subsidized units produced from January-October 1972 we have 960 units under Sec. 235 rehab and 8,136 under Sec. 236 and 221(d) (3) BMIR rehab. In other words, many of the losses have been drawn from a non-representative sample (rehab-vs. new) which constitutes an insignificant 4.81 percent of the total. Reference to Table 1 of this article will show that in Fiscal Year 1972 rehabilitation constituted only 8.43 percent of the total. It is unfair for politically inspired writers to use such dramatic and misleading examples from the rehabilitation sector

of the program when the overall delinquency rate is about 8 percent and the default rate as previously mentioned is an overall 2 percent and even lower in the new construction part of the programs. We hasten to add that in their ignorance such writers may have confused the Sec. 115, Sec. 312, and Sec. 223(e) grant and loan programs with the Sec. 235 and Sec. 236 programs which were the subject of their attack. It seems worthwhile to make a caricature of these charges. If 100 percent of the 14,145 units rehabilitated under Sec. 235 and Sec. 236 during fiscal year 1972 were to go through default; and public sale of the collateral were to result in a \$10,000 loss per unit (this is ludicrous!) the loss would be \$141,450,000 throughout the nation. Yet the media represented the potential loss to be \$200,000,000 in Detroit, Mich., alone! It is hoped that our redundancy has made clear that the losses to date will be small by any reasonable estimate when compared with unprecedented levels of production achieved in all sectors of housing production. If any tentative conclusion may be drawn it is that the desire on the part of the current administration to break all records may have temporarily overloaded the managerial capacity of HUD-FHA.

Current Status of the Special Risk Insurance Fund

A preliminary review of the Special Risk Mutual Insurance Fund, as of June 30, 1971²¹ seems to indicate that this fund is having the typical beginning year difficulties of any insurance reserve which has been set aside for underwriting risks on which there is insufficient actuarial experience to estimate probable losses. The experience to date is too limited for the basis of decision making. As most are aware the insurance premium charge is $\frac{1}{2}$ percent

of the remaining mortgage balance. This charge is imposed on all the risks covered by the pool (i.e. Sec. 223(e), 235, 236, 233, and 237 programs). Further it is assumed that they will be paying the insurance premium of $\frac{1}{2}$ of one percent for about twelve (12) years, based on typical experience. Therefore, it should be clear that heavy losses in early years will be off set by premium payments over time. It is obvious that Sec. 223(e) has imposed heavy losses to date. Unfortunately, the available statistical data fails to separate Sec. 223(e) from the others in the pool. It would be desirable for such data to be made available for analysis. A crude analysis indicates that of over 541,000 units insured about 8,350 units have defaulted through June 30, 1971. The acquisition costs of these units (1971 dollars) averaged \$15,604 each. The proceeds on properties sold were \$11,758 per unit for a loss to the Special Risk Fund of \$4,266 per unit. It should be noted that taxes, maintenance and operating expenses during the holding period (average 7 months) were about \$2,600 per unit or 61 percent of the loss per unit. Such a charge for indirect costs is atypical and should have further analysis. Under the well established Sec. 203 insurance program the same charges have constituted 16 percent of the loss or \$2,696 per unit. Such comparisons are of doubtful validity, however, because the Sec. 203 experience extends over 30 years while the Special Risk Insurance Fund is for practical purposes only about three (3) years old. In summary, the losses are within reasonable limits in view of the overload upon management, problems of underwriting and appraising, etc. Overtime the risk appears manageable although Congress may be required to make advances to the fund while it awaits the accumulation of reserves

from premiums paid. Some consideration should be given to a slight increase in the insurance premium rate if experience is adverse. An increase at this time would be premature.

HUD-FHA Pioneers Site Selection Criteria for Multi-Family Projects

It is necessary and desirable to discuss the special problem of Sec. 236 multi-family projects. All the foregoing discussion is, in a general sense, relevant to the multi-family programs. One essential difference is worthy of separate discussion, site selection and project management.

There is no question that the low site density-ratios which HUD-FHA did impose on Sec. 236 projects caused an immediate problem in finding sites in metropolitan areas, let alone selecting them. Experience by families occupying various high rise sites tends to suggest HUD-FHA's decision was wise; however, it did make it quite difficult to find sites in the inner-city which had low enough land costs per dwelling unit to be feasible. It should also be said that the diseconomies of scale implicit in FHA-Form 2013 methods of financing militated against projects with less than 90-100 units which made it even more difficult to find inner-city sites. Of course, the resistance to low- to low-moderate-income families entering the suburban fringes has been well documented. All of these things have tended to force up land prices for Sec. 236 projects as with all others. In spite of these socio-economic pressures, the average price of land per dwelling unit in Sec. 236 housing is \$830 as compared with Sec. 207 (regular profit-motivated projects) where it is \$1,082. More important as a percent of the Median mortgage amount per unit the Sec. 236 projects have a raw land cost per dwelling unit of 5.64 percent while Sec. 207 comes in at 7.15 percent. We

hasten to add that these are statistical averages and therefore we are aware that probably some unjustified windfalls have occurred as happens in free enterprise. A government policy requiring impartial appraisals by professionals could do much to ward off that particular demon. In addition, much has been said about poor site selection for the interest subsidy programs. However HUD-FHA did respond quickly to an actual need. In 1971 HUD-FHA set up site selection criteria for the multi-family interest subsidy program to minimize poor site selection. It is saddening that the current administration has suspended mortgage commitments which might have put these site selection criteria to the test of actual experience in a significantly large number of projects. On the face of it the criteria seem to be a careful and deliberate attempt to fulfill the socially-motivated purpose of the Sec. 236 program while still achieving project success. Simply stated the criteria set up priority of funding on the basis of the rating achieved by the project under eight project criteria. Ratings of superior, adequate and poor are given. A single "poor" disqualifies a project. The criteria are:

- (1) Need for low(er) income housing in the local economy.
- (2) Minority housing opportunities.
- (3) Improved location for lower income families.
- (4) Relationship of the project to orderly growth and development.
- (5) Relationship of the proposed project to the physical environment.
- (6) Ability of the Contractor and/or the sponsor to carry out the project.
- (7) Project potential for creating minority employment and business opportunity.
- (8) Provision for sound housing management.²²

It seems fair to say that most of the criteria should apply across the board to all kinds of projects from luxury to low-rent public housing. An adequate test of these criteria could do much to improve the quality of pre-planning and market research that is done by all real estate developers. The same should be said for the new HUD-FHA affirmative marketing plans and affirmative management plans. Clearly, the position is taken here that HUD-FHA has moved vigorously and boldly to bring about orderly development of multi-family interest-subsidy projects. The author believes the site selection criteria should be extended to Sec. 207 and Sec. 221(d) (4) projects, which are without subsidy, so the government can properly use these laws to demonstrate socially responsible development.

Fifth, we must deal with the most important problem, the ultimate cost to the taxpayer of the subsidy to the occupants of Sec. 235 and Sec. 236 housing. Keeping in mind the goal is to provide decent housing for housing deficit families, it is fair to say that if the cost is inordinate the program should be terminated. Certainly, if the potential cost were even near the total of \$200 billion quoted by Breckenfeld of Fortune magazine it would at present be politically unacceptable. In calling upon our taxpayer to reallocate our national resources for over a decade in order to achieve the end of decent housing for the average American it would seem we should provide more accurate estimates. In 1968 the report to the Sparkman Committee conveniently ignored all subsidies after 1978, thereby underestimating the subsidy likely to occur by almost \$10 billion.²³ Now, the current HUD-FHA administration has cast out reason and estimated the subsidy by extrapolations which maximize the worst of circumstances thereby overestimating the subsidy by many billions of dollars. We have chosen to

develop a computer program which would simulate the production of Sec. 235 and Sec. 236 housing under "pessimistic"; "optimistic"; and "most likely" circumstances from 1968-1978 plus the amount of all subsidies until they were no longer required.

In 1972 the computer model was refined and broadened to simulate production for each year assuming: "deflationary"; "most likely"; and "highly-inflationary" macro-economic circumstances. It is important to note that we chose to forecast the maximum subsidy likely to occur under the three sets of circumstances. Therefore, our estimates of the costs of appropriation should be viewed as conservative. We have set forth below a narrative of the basic structure of our computer model.

Description of the Computer Model

Our major research objective was to calculate the cost to the federal government of the interest subsidy programs. To achieve that end it was necessary to set up a prototypical Section 235 dwelling unit and a Section 236 multi-family dwelling unit which would represent the 1968 construction costs for all the dwelling units to be built each year under the program. By examining actual projects in the field, we determined the user-needs for dwelling unit size for each program under Federal Housing Administration (FHA) minimum property standard controls. In effect, we were seeking to determine the kinds of dwelling units most likely to be built under the program and the proportion of the total number produced each year which were likely to be of a certain kind and size (e.g., single-family sales housing: 1-, 2-, or 3-bedroom). We then determined by the use of actual FHA projects [221(d) (3), 203, 207, 213] and some low-rent housing projects the 1968-1969

actual construction costs per dwelling unit for the various 1-, 2-, and 3-bedroom dwelling units. We verified the reasonableness of these construction costs with architects, contractors, housing consultants, and two conferences with FHA personnel. Having satisfied ourselves of the reliability of our beginning year (1969) actual construction costs for each class of prototypical dwelling units, we were then ready to construct a computer model which would calculate through an iterative and recursive process: the annual production cost for each type of dwelling unit; the necessary rents or payments to amortize the unit; the threshold of family income for eligibility; and the difference between the shelter costs actually paid by the occupant (i.e., "basic rent") and the total dwelling-unit costs (i.e., "market rent") by which the subsidy is determined each year. The computer would then use the national goals each year as a multiplier to determine the total annual subsidy, and continue calculating the subsidy so long as the occupant remained eligible each year thereafter.

In order to estimate properly the annual construction costs, shelter costs and the subsidy, it was necessary to modify each component of the construction costs and the occupants' shelter costs by our judgmental estimates of the probable rates of change. Therefore the computer model did in a stepwise fashion calculate the impact of annual changes in construction costs, amortization, personal incomes, land costs, real estate taxes, and insurance as they affected both sides of the equation. As a result, although we started out with prototypical dwelling units for the Section 235 (sales) and Section 236 (rental) housing programs for the year 1969, the costs of construction and the costs of occupancy were clearly modified each year in the computer analysis as though the units were built.

We wish to make it clear that our judgments as to rates of change were not the only factors which affected the ultimate totals of the congressional appropriations. We were forced to decide the size of the dwelling units (i.e., how many square feet per 3-bedroom apartment). We chose to bias our analysis in accordance with controls currently imposed by FHA on would-be developers. Because the subsidy programs invoke certain immutable economic laws which place limits on the minimum incomes of eligible occupants, we were forced to choose the kinds of housing likely to be built within the goals of the programs. We chose a mix of 1-, 2-, and 3-bedroom units based on current FHA practices and discussions in the field with those engaged in building this type of housing. However, it should be clear that if FHA permits more spacious dwelling units, or the construction of a higher proportion of 3-, 4-, and 5-bedroom units then our inputs to our computer model would change, as would our resulting calculations of subsidies. It should be obvious that the total subsidy and the construction cost estimates are largely dependent on the reasonableness of our assumptions.

Since the 1971 runs of the computer model have come within reasonable tolerances of projecting the probable costs to the federal government of subsidizing the interest costs resulting from the HUD Sec. 235 and Sec. 236 low-to low-moderate-income housing programs; the major purpose of the new analysis was to establish limits above and below which it was unlikely the subsidy totals would range over the life of the program. In order to enable the reader to evaluate the "realism" of these judgmental assumptions the writer has set forth below these critical input variables.

Table 4

DIFFERENCES AND SIMILARITIES **

Recapitulation and Summary of Judgmental Models for Inputs to Housing Production Process to Determine Level of Subsidy as Prepared by This Report

Input Item	Percent Rates of Change and Other Items This Report
Dwelling unit size	1-bedroom - 550 sq ft
Minimum property standards	2-bedroom - 760 sq ft
	3-bedroom - 960 sq ft
Type of construction	
236	
Elevator	15% - elevator
Modular	15% - modular
Walk-up	70% - walk-up
235	
Single family	100% single family
1 - 4 family	
Estimated proportion of	10% - 1-bedroom
each size unit produced	20% - 2-bedroom
each year	60% - 3-bedroom
Land cost	+6% per annum
Ratio of land cost to	
total cost	
236	8% for high-rise
	20% for walk-ups and
	other
235	20% - single family
Amortization term	
236	40 years
235	30 years (rehab 20 years)
Interim financing costs	+15% per dwelling each year

I - "Optimistic" - Mortgage Contract Rate - 6% (includes FHA i.p.);
Construction Cost (labor and material) to increase at 4.2% per annum;
Family Income is expected to rise by 3.0% per annum. This provides
for a labor cost increase of 6.0% per annum.

II - "Most Likely" - Mortgage Contract Rate - 7.5% (includes FHA i.p.);
Construction Cost (labor and material) to increase at 4.7% per annum;
Family Income is expected to rise by 8.0% per annum. This provides for
a labor cost increase of 8.0% per annum.

III - "Pessimistic" - Mortgage Contract Rate - 8.5% (includes FHA i.p.);
Construction Cost (labor and material) to increase at 8% per annum;
Family Income is expected to rise by 8.0% per annum. This provides
for a labor cost increase of 14.0% per annum.

** All other input variables in the various programs are relative constants

The intensive financial analysis brought about by simulation of such a wide range of national economic circumstances make it clear that the old axiom about real estate financing remains true. The annual constant for mortgage amortization imposes upon the mortgage lender the burden of accepting cheaper dollars as inflationary policies continue. It is apparent, by way of the computer analysis, that Sec. 235 and Sec. 236 are structured in such a way that the "life of the subsidy" is always relatively short, whatever the reasonable expectations of risk may be. This is because of the high probability that the occupants' income will rise while the mortgage payment, by contractual agreement, remains constant. In this way the federal share diminishes as the occupants' share of the payment rises. A review of the tables below will indicate the programs are workable. The computer program is available on request.²⁴

Table 5 and 6 indicate a linear projection of the "most likely" subsidy, and required "family-incomes" under both Sec. 236 and Sec. 235, respectively. A comparison with Tables 2 and 3 will indicate that our estimate of family incomes and the amount of the subsidy are showing a time-lag of about six to twelve months. This is attributed more to the linear nature of our projections than any other causative factor. In setting up our model we judged that the federal government would find the level of inflation in 1969-1971 intolerable. Therefore, we rejected a 10-year compounded rate of change based on the rate of inflation in 1965-1971. It should be obvious that we chose to both start out with a lower subsidy than would actually occur and in later years have a higher subsidy than would occur. This was a result of the simplicity of our model. We chose simplicity rather than attempt to imply

the illusion of precision over such a long time-horizon. Another good question which might be raised is why do we assume that people in the low- to low-moderate-income brackets will have a rise in family income which will cause them to pay a higher share of the rent according to the "basic-rent" and "market-rent" formulae? This factor was very carefully considered. All we can do is point to the past rate of increase in nominal dollar incomes and remind you that the debt service is paid by these inflated dollars. It appears to be beyond question that the rising family income of the occupants is a reasonable certainty, unless there is a maximum effort to thwart the inevitable by adverse tenant selection under (Sec. 236) by continuously seeking out lower and lower income occupants.²⁵ Such self-defeating tactics seem improbable.

Table 5

REPRESENTATIVE EXAMPLE OF A SUBSIDY PROGRAM FOR A SECTION 236
APARTMENT DWELLING, UNIT OCCUPANT FAMILY-APARTMENT CONST. IN (1972)

Year	Family Income (Adjusted)	Annual Net Rent (Basic)	Annual Subsidy	Monthly Subsidy
1972	\$5,921.66	\$1,480.42	\$738.60	\$61.55
1973	6,158.55	1,539.62	679.38	56.62
1974	6,404.37	1,601.20	617.80	51.48
1975	6,661.06	1,665.25	553.75	46.15
1976	6,927.51	1,731.86	487.14	40.60
1977	7,204.61	1,801.14	417.86	34.82
1978	7,492.79	1,873.18	345.82	28.82
1979	7,792.50	1,948.11	270.89	22.57
1980	8,104.20	2,026.04	192.96	16.08
1981	8,428.37	2,107.08	111.92	9.33
1982	8,765.50	2,191.36	27.64	2.30

Assumptions: Cost of dwelling unit--\$15,090.00; Contract interest rate-- 7 percent + 1/2 percent FHA i.p.; Amortization term--40 years; Market rental charge--\$184.00; Basic rental charge--\$123.37; Mini-max range of family income eligible for admission to this dwelling unit--\$4,800 to \$7,400. We further assumed that the ratio of maintenance costs would either remain constant or, if increased, would be passed on to the tenant as increased rent without affecting the subsidy.

Table 6

REPRESENTATIVE EXAMPLE OF A SUBSIDY PROGRAM FOR SECTION 235,
SINGLE-FAMILY, 3-BEDROOM HOUSE FOR AN OCCUPANT ELIGIBLE FOR THE
MAXIMUM SUBSIDY--HOUSE CONSTRUCTED IN 1972

Year	Family Income (Adjusted)	Annual Maximum Rent Paid by Owner (@ 20% of income Biennially Adjusted	Annual Subsidy (Maximum)	Monthly Subsidy (Actual)
1972	\$5,960.29	\$1,192.06	\$817.27	\$68.10
1973	5,960.29	1,192.06	817.27	68.10
1974	6,446.65	1,289.33	720.00	60.00
1975	6,446.65	1,289.33	720.00	60.00
1976	6,972.69	1,394.54	614.79	51.23
1977	6,972.69	1,394.54	614.79	51.23
1978	7,541.67	1,508.34	500.99	41.75
1979	7,541.67	1,508.34	500.99	41.75
1980	8,157.07	1,631.42	377.91	31.49
1981	8,157.07	1,631.42	377.91	31.49
1982	8,822.68	1,764.54	244.79	20.40
1983	8,822.68	1,764.54	244.79	20.40
1984	9,542.61	1,908.52	100.81	8.40
1985	9,542.61	1,908.52	100.81	8.40

Assumptions: Cost of dwelling unit--\$17,800; Contract interest rate-- 7 percent + 1/2 percent FHA i.p.; Amortization term--30 years; Monthly payment FHA full rate--\$133.47 + \$33.97 for taxes and insurance @ 25 percent of monthly payment--\$167.44 full monthly payment @ Market rate; Monthly payment principal and interest @ 1 percent--\$99.33; Maximum subsidy is \$68.10/mo.; Total annual mortgage payment--\$1,601.

The remaining tables--7, 8, 9, and 10 demonstrate beyond a reasonable doubt that the interest subsidy programs appropriation costs are far below the estimates ballyhooed by the mass media. Table 9 relates the range of fair and reasonable estimates. It appears that the cumulative total appropriations from the interest subsidy program might range from \$14,393,480,000 to \$18,789,260,000; payable in annual installments not exceeding \$2.09 billion in any case. Taking the higher cost of about \$19 billion it must be said that it compares favorably with the total costs of the aerospace program of the recent administrations and would result in the production of billions in housing assets of substantial permanence when compared with the pyrotechnical

display of the moonshot. The amazing difference between the \$200 billion estimate and the \$19 billion set forth here must be largely attributed to the differences in what are termed reasonable expectations as to the rates of change in costs of production and family incomes overtime and naive extrapolations of costs without considering benefits. It is hoped we have demonstrated that the interest subsidy programs do stimulate production and that the costs are reasonable in view of the production levels achieved.

The difficulties of such long-range forecasts which look into the future as far as 1992 should be obvious. Too often in scholarly literature a forecast is made by simply projecting past time-series forward. In our computer analysis great care was taken to judgmentally interrupt these trend lines and make adjustments which we believed would result from socio-economic and political ramifications. An interesting case in point is our "pessimistic" or trend III column in tables 7, 8, and 9. In an inflationary economy we assumed the demands for new plant and equipment, public construction, joined with the oligopolistic power of the construction trades unions, would exact a 14 percent per annum increase in labor costs, something which did occur in the years 1965-1972, on occasion. On the other hand we saw low- to low-moderate-income occupants of subsidy housing unable to keep up with the pace of wage increases of the construction trades even in a high rate of inflation. We also felt that pressure from those on fixed income, and general concern about soaring price levels, would result in slowing the pace of increase of family incomes to a rate of 8 percent per annum. The result, not surprisingly, is that the costs of the subsidy are actually lower in an highly inflationary economy than in the mildly inflationary economy we are now experiencing, if you accept the assumptions. Another possible weakness of the analysis is that

we assumed the levels of production attributed to rehabilitation would be as announced by the President in his report on the national housing goals. To do so we must create a new rehabilitation industry, and a new multi-skill work force to produce significant numbers of rehabilitated dwelling units. There is no indication this will occur. However, we had limited our task to an evaluation of the Sec. 235 and Sec. 236 programs to date. It can be said the nation did create an amazing number of new low- to low-moderate-income housing units while at the same time we made a national trip to the moon. We believe the rehabilitation levels could be achieved if the federal government were to consider that a national goal. In the meanwhile because of the scandalous misunderstandings created by the confused writings of the mass media we are all facing the possibility of housing allowances.

Housing Allowances as an Alternative

Housing allowances are another form of redistribution of income more akin to the negative income taxes. As stated by Nourse, in regard to the negative income tax, "...Because of the redistribution of income there would be a new array of rent bids for each of the existing housing units. At the upper end of (income) distribution there would be no change in rank order of bids, although each bid might be somewhat less. At the lower end, however, there would be a new income floor (from the negative income tax) below which families do not fall.....since the average income of families receiving benefits has risen all bids of these families will tend to rise. Nevertheless, with higher incomes higher bids can also be made for improvements in quality... thus after the initial rise...in some cases their bid would be sufficient to improve the quality of dwelling (occupied by the family)." ²⁶ The advocates of

housing allowances wish to go one step further. Rather than leave it to the low-income families as to how much they might spend on standard housing the concept requires that the subsidy be spent on housing only. Obviously, vouchers could be used as with our food stamps, or joint-payee checks could be used as with the relocation adjustment allowances of urban renewal experience. The programs suggested are vague concerning how the taxpayer would be assured the subsidized family was obtaining standard housing, and that standard housing would be available in sufficient supply to avoid a sudden "unreasonable" escalation in rents due to short supply in that segment of the market. It is an unfortunate truth that some studies have demonstrated that standard housing is already in short supply for low- to low-moderate-income families.²⁷ Much more important it is beyond question that the lack of code enforcement is pervasive in our nation. In a study of 29 communities the General Accounting Office (GAO) found that 28 did not have effective city-wide local code enforcement. The Comptroller General in a report entitled, "Enforcement of Housing Codes: How can it help achieve the Nation's Housing Goals" stated that HUD has not used its legislative authority to halt funds for various federal housing programs in order to require communities to adopt effective local code enforcement programs.²⁸ Problems don't go away by ignoring them. None of the plans for housing allowances have demonstrated tight surveillance over the problem of quality of housing or, whether or not the recipient of the housing allowance will in fact be obtaining standard housing for the taxpayer's money. The lack of code enforcement is only one major obstacle. There are very real cultural barriers which discourage the low- and low-moderate-income families from venturing out of the deteriorated ghetto areas with a government voucher in hand. Housing allowance programs might require the landlord to accept a standard

lease which would guarantee code compliance and warranties of fitness of habitability and fair average quality. Also it appears a new kind of "caseworker," might be necessary to make inspections of the physical conditions to determine for the taxpayer that the housing allowance recipient was obtaining a standard dwelling. Another major problem with the housing allowance program is that due to the mobility of the tenants; possible politically inspired withdrawals of support; and lack of a long-term federal contribution contract, it could take many years to convince the producers of housing that they should produce in response to this "non-economic" demand where the "ability to pay" is dependent on the largess of changing government.

There is little reason to have confidence that housing allowances will produce fewer scandals than the Sec. 223(e) "deteriorated neighborhood mortgages" which were to be covered by a congressional special risk fund. Worse, unlike the Sec. 235 and Sec. 236 interest subsidy programs which have produced a substantial volume of housing it seems unlikely housing allowances will act as an incentive to bolster production. The glimmer of hope is that the 221(d) (4) program will be modified to include site selection criteria such as in the Sec. 236 multifamily program. The 221(d) (4) low- to low-moderate-housing projects are without subsidy of any kind. They are profit motivated and have no special rent controls or income limits. Recipients of housing allowances and leased housing could be among the new occupants of 221(d) (4) projects.

In the end we must remember former Senator Paul Douglas's words, after his investigation of our urban problems in 1968. In summary, he said that the way the many costs of housing fit together; we should keep in mind there

is no panacea, we must work on reducing the costs of each item and by summing small savings to bring about a significant reduction in cost to our low- and moderate-income families. Such a complex economic good as housing can have no simple solution to the problem of delivering it in adequate supply, of decent quality, and at convenient locations. We must retain all the programs which are workable if we are to solve this problem of market failure by way of adopting the mixed enterprise of government and urban housing development.

Conclusions

First, it appears we have established beyond a reasonable doubt that Sec. 235 (new) and Sec. 236 (new) interest subsidy programs are working well enough to be continued. Sec. 235 rehabilitation and Sec. 236 rehabilitation programs should be limited to viable neighborhoods in which no more than spot (20 percent) blighting has occurred and in which systematic code compliance activity is a hard reality. The use of these programs in an effort to stem the tide of advanced deterioration is unworkable without neighborhood rehabilitation and renewal of the municipal infrastructure.

Second, the ill-fated Sec. 223(e) "deteriorated" neighborhoods mortgage program must be brought to an end. This experiment with the waiving of underwriting standards, though theoretically feasible, has been proven to be beyond the capacities of FHA-HUD underwriting personnel.

Third, housing allowances and leased public housing should be pushed forward along with 221(d) (4) and turn key public-housing development to increase the stock of standard housing available to low- and low-moderate-income families and accelerate the exodus of delapidated uninhabited housing from our national inventory.

Fourth, as stated elsewhere,²⁹ the overall costs of the interest subsidy programs could be substantially reduced by using federal full-faith and credit tax-free municipal bonds through local agencies as is now done with public housing authority notes. Alternative cost could be reduced by direct financing through GNMA.

Finally, we must deal with the body politic. This report demonstrates the effectiveness of the interest subsidy programs. They have been an incentive to our housing developers to produce an unprecedented volume of new low- to low-moderate-income housing. The problems of the programs in the early years (1969-1972) primarily relate to suboptimization resulting from an overloading of the managerial capacity of HUD-FHA. Human capital, like machinery and equipment will break down if operated at rates which are over capacity. The problems of this overload (i.e. lax underwriting, incompetent appraising) have adversely effected the political acceptability of the programs. Because the major voices of the communication media lag far behind housing economists in their understanding of the nature and quality of housing demand (e.g. their continuing support of filtering). They seem to be unaware of the market's failures. The result is, the taxpayer is misled into believing the programs don't work and are wasteful. In fact, the cultural lag is so great that the media even represent that "market filtering" does work; in that it effectively improves the quality of housing available to low-income families in the short-run, in spite of clear evidence to the contrary. The major obstacle to accelerating the availability of decent housing for every American family at convenient locations is ideological opposition. It appears likely that whatever form the welfare transfer payment takes a program national in scope will

have such vigorous opposition that elected officials will find it politically unsupportable after a few years. The life of such programs is short in a democracy with a free press. Consideration should be given to a lower, regional, political profile such as the EDA-Appalachian program. Housing programs in SMSA selected on the basis of their high percentage of: substandard housing, concentrated high density poverty enclaves; abandoned neighborhoods, responsible levels of code compliance activities, etc.; would produce a significant volume of housing production at convenient locations without awakening unreasoning opposition.

FOOTNOTES

1. The primary source for statistics on housing starts, federal mortgage insurance, and other detailed data on HUD programs and financial operations is the HUD Statistical Yearbook. This report uses the 1971 HUD Statistical Yearbook as a primary source, it is available from the GPO Washington, DC 20410.
2. Cooper, James R. "Can the 1968-1978 National Housing Goals be Achieved?," Program on Housing Research and Development, Urbana-Champaign, University of Illinois, 1971, 57 pages.
3. "The Bankruptcy of Subsidized Housing," Business Week, New York, McGraw-Hill, pp. 42-48, May 23, 1972; and Breckenfield, Gurney, "Housing Subsidies are a Grand Delusion," New York, Fortune, February 1972, p. 135, among others.
4. "Romney on Housing Subsidy Costs," House and Home, New York, McGraw-Hill, p. 16, September 1971.
5. Harvey, Robert O., "The New Crack in the Picture Window," Illinois Business Review, Urbana-Champaign, University of Illinois, Vol. 29, No. 4, April 1972, pp. 6-8.
6. Renshaw, Edward F., "The Demand for Housing in the Mid-1970s," Land Economics, Madison, Wisconsin, August 1971, pp. 249-255.
7. Smith, Wallace F., "Aspected Housing Demand-Absorption, Demolition, and Differentiation," Berkley, California, Center for Real Estate and Urban Economics, Research Report 29, p. 1, 1966.

8. Housing and Urban Development Act of 1968, 90th Congress, 2nd Session, Part 2, pp. 1319-1409.

9. Hodes, Daniel A., "The Modular Housing Industry," Financial Analyst Journal, May-June 1970, Figure 5, and Kristof, Frank, "Urban Housing Needs Through 1980s," National Commission on Urban Problems Research Report No. 10, Washington, DC Government Printing Office, 1968.

10. Op. cit., footnote No. 2 pp. 1-9.

11. Kristof, Frank S., "Federal Housing Policies-Subsidized Production," Filtration, and Objectives, Part I, Land Economics, Vol. ILVII, No. 4 November 1972, pp. 309-320.

12. Lowry, Ira, "Filtering and Housing Standards," Land Economics, Vol. XXVI, No. 4, p. 362.

13. Editorial Staff, "Federal Housing is in Trouble," The Wall Street Journal, November 20, 1972, p. 16.

14. Ratcliff, Richard U., Urban Land Economics, New York, McGraw-Hill Book Co., Inc., 1949, pp. 333-335.

15. Though Guy and Nourse ignored changes in quality and concentrated on changes in value-price (by occupational proxies) their underlying data indicates many years passing between the "moves" necessary for filtering.

Guy, Donald C., "An Analysis of a Filtering Hypothesis," University of Illinois, unpublished dissertation, 1971.

Guy and Nourse, Hugh, "The Filtering Process: The Webster Groves and Kankakee Cases," Proceedings American Real Estate and Urban Economic Association, 1970.

16. Karmin, Monroe W., "With White House Ax Poised to Fall, Gloom Pervades HUD," New York, The Wall Street Journal, December 29, 1972, pp. 1, 17.

Bulkeley, William and Danforth, Austin, "Cuts in Federal Subsidy of Homes Brings Gloom to the Nation's Builders," The Wall Street Journal, No. 60 January 11, 1973, pp. 1, 27.

17. The Real Estate Appraiser, May-June 1972, Vol. 38, No. 3, pp. 51-58, (Reprint of Fortune article, see footnote 3).

18. Schussheim, Morton J., "Toward a New Housing Policy Legacy of the Sixties," Committee for Economic Development, Supp. paper No. 29, 1969, pp. 13-14.

19. Cooper, James R., Guntermann, Karl L., "Changing Neighborhoods: Social Evolution or Threat to Social Stability," Chicago, Illinois, The Real Estate Appraiser, the Society of Real Estate Appraisers, November-December 1972, pp. 7-14.

20. Sec. 223(e) "Basic Laws and Authorities on Housing and Urban Development," revised through January 31, 1970, printed for the Committee on Banking and Currency, House of Representatives, 91st Congress, 2nd Session, USGPO, Washington, DC 20402. See the same for Sec. 238 and other sections.

21. Op. cit. footnote No. 1, HUD Statistical Handbook for 1971, Table 293, Special Risk Insurance Fund, Statement of Profit and Loss, Properties Sold through June 30, 1971.

22. "Rental and Cooperative Housing for Lower Income Families," HUD Program Guide for Sponsors, Builders, and Lenders, HPMC-FHA G442-17, September 1971, pp. 3-8.

23. US Senate, Committee on Banking and Currency, Sub-Committee on Urban Housing, Hearings on Housing and Urban Development Legislation of 1968, 90th Congress, 2nd Session, Part 2, 1968, pp. 1319-1409.

24. Op. cit footnote No. 2, Program on Housing Research and Development, 1204 W. Nevada, Urbana, Illinois, University of Illinois.

25. "Money Income by Race and Region." Percent Distribution by Families and Unrelated Individuals - 1968 and earlier years. Source: Department of Commerce, Bureau of the Census, Current Population Reports, Series P-60, No. 59, No. 60, No. 66, and No. 68.

26. Nourse, Hugh O., "The Effect of Negative Income Tax on the Number of Substandard Housing Units," Madison, Wisconsin, Land Economics, Vol. XLVI, No. 4, November 1970, p. 439.

27. Cooper, James R., and Morrison, Cathy A., "Vacancy Survey, Champaign-Urbana Housing Market," November 1971, Program on Housing Research and Development, University of Illinois, Urbana, Illinois; see Kristof footnote No. 11 this article; also Kristof, "Urban Housing Needs Through the 1980s," Research Report No. 10, National Commission on Urban Problems, USGPO, Washington, DC, 1968.

28. GAO, and Comptroller General, "Enforcement of Housing Codes: How it can Help Achieve the Nations' Housing Goals," US General Accounting Office, 441 G Street, N.W. Washington, DC 20548.

29. Op. cit. footnote No. 2, p. 38.

APPENDIX

Table 7

SUMMARY TABLE SECTION 235

Estimated Annual and Cumulative Costs to the Federal Government of Subsidizing the Interest Payments in the HUD Section 235 (Sales Housing) Program in Accordance with Federal Annual Contribution Contracts Required to Meet the National Housing Goals from 1969 to 1978. Assumption: Market Interests Rates; I = 6%, II = 7.5%, III = 8.5% (inc. FHA Insurance Premiums).
Land Cost Increase = 6% annually *

Year	No. of Units to be Constructed or Rehabilitated new rehab (000 omitted)		Estimated Annual Sub- sidy @ 6% (000,000 omitted) I - 6% *	Cumulative Cost to U.S. @ 6% (000,000 omitted) I - 6% *	Estimated Annual Sub- sidy @ 7.5% (000,000 omitted) II - 7.5% *	Cumulative Cost to U.S. @ 7.5% (000,000 omitted) II - 7.5% *	Estimated Annual Sub- sidy @ 8.5% (000,000 omitted) III - 8.5% *	Cumulative Cost to U.S. @ 8.5% (000,000 omitted) III - 8.5% *
1968	---	---	-----	-----	-----	-----	-----	-----
1969	55	30	\$ 39.50	\$ 39.50	\$ 53.39	\$ 53.39	\$ 63.06	\$ 63.06
1970	70	40	92.77	132.26	125.58	178.97	150.48	213.54
1971	80	45	151.18	283.44	205.32	384.29	242.53	456.07
1972	80	45	210.74	494.18	287.00	671.29	336.82	792.89
1973	80	45	266.80	760.98	364.51	1,035.80	417.77	1,210.66
1974	80	45	323.81	1,084.80	443.72	1,479.51	499.37	1,710.02
1975	80	45	376.83	1,461.62	518.01	1,997.52	564.27	2,274.29
1976	100	60	452.32	1,913.94	623.61	2,621.13	670.10	2,944.39
1977	100	60	524.27	2,438.21	724.94	3,346.07	768.72	3,713.10
1978	100	60	594.90	3,033.11	825.21	4,171.28	861.35	4,574.46
1979			545.30	3,578.41	759.04	4,930.32	714.32	5,288.78
1980			488.44	4,066.85	683.09	5,613.41	544.26	5,833.03
1981			437.25	4,504.10	611.91	6,225.32	419.50	6,252.53
1982			378.92	4,883.02	530.22	6,755.55	272.23	6,524.76
1983			327.93	5,210.95	457.11	7,212.66	181.65	6,706.42
1984			269.88	5,480.83	373.92	7,586.57	77.27	6,783.69
1985			223.53	5,704.35	307.89	7,894.46	40.07	\$6,823.76
1986			171.06	5,875.41	233.78	8,128.24	-----	-----
1987			133.58	6,008.99	180.26	8,308.50	-----	-----
1988			91.58	6,100.57	118.91	8,427.40	-----	-----
1989			66.41	6,166.99	80.61	8,508.02	-----	-----
1990			37.80	\$6,204.79	36.78	8,544.79	-----	-----
1991			-----	-----	18.83	\$8,563.62	-----	-----
1992			-----	-----	-----	-----	-----	-----

Table 8

SUMMARY TABLE SECTION 236

Estimated Annual and Cumulative Costs to the Federal Government of Subsidizing the Interest Payments in the HUD Section 236 (Multi-Family Projects) Program in Accordance with Federal Annual Contribution Contracts Required to Meet the National Housing Goals from 1969 to 1978. Assumptions: Market Interest Rates; I = 6%, II = 7.5%, III = 8.5% (inc. FHA Insurance Premiums). Land Cost Increase = 6% annually *

Year	No. of Units to be Constructed or Rehabilitated new rehab (000 omitted)		Estimated Annual Sub- sidy @ 6% (000,000 omitted) I - 6% *	Cumulative Cost to U.S. @ 6% (000,000 omitted)	Estimated Annual Sub- sidy @ 7.5% (000,000 omitted) II - 7.5% *	Cumulative Cost to U.S. @ 7.5% (000,000 omitted)	Estimated Annual Sub- sidy @ 8.5% (000,000 omitted) III - 8.5% *	Cumulative Cost to U.S. @ 8.5%
1969	60	30	\$ 38.74	\$ 38.74	\$ 52.66	\$ 52.66	\$ 62.33	\$ 62.33
1970	65	35	80.74	119.48	109.58	162.25	127.37	189.70
1971	75	35	126.60	246.08	171.52	333.77	195.26	384.96
1972	95	45	185.66	431.74	251.23	584.99	281.15	666.10
1973	120	55	260.84	692.57	352.63	937.63	388.65	1,054.76
1974	170	80	373.55	1,066.12	505.26	1,442.88	555.14	1,609.90
1975	200	100	509.70	1,575.82	689.30	2,132.18	754.47	2,364.37
1976	220	130	667.85	2,243.67	902.43	3,034.61	989.50	3,353.87
1977	270	80	827.09	3,070.77	1,115.39	4,150.00	1,220.13	4,574.00
1978	220	80	943.59	4,014.36	1,265.74	5,415.74	1,350.55	5,924.55
1979	---	---	846.53	4,860.89	1,112.12	6,527.85	1,019.23	6,943.78
1980			746.55	5,607.44	956.63	7,484.48	704.54	7,648.32
1981			644.73	6,252.17	801.94	8,286.43	426.43	8,074.75
1982			544.00	6,796.17	649.24	8,935.67	204.47	8,279.23
1983			445.06	7,241.24	500.92	9,436.59	58.69	\$8,337.91
1984			349.00	7,590.23	360.53	9,797.19	-----	-----
1985			257.79	7,848.03	234.60	10,031.72	-----	-----
1986			174.45	8,022.48	130.02	10,161.74	-----	-----
1987			103.49	8,125.97	53.55	10,215.29	-----	-----
1988			48.79	8,174.77	10.35	\$10,225.64	-----	-----
1989			13.92	\$8,188.69	-----	-----	-----	-----
1990			-----	-----	-----	-----	-----	-----

* See Table 4 Assumptions

Table 9

SUMMARY TABLE OF COST OF INTEREST SUBSIDY PROGRAMS

Estimated Annual and Cumulative Costs to the Federal Government of all the Federal Annual Contributions Required to Subsidize Interest Costs Under Section 235 and Section 236 National Housing Programs for Housing Constructed in Accordance with the National Housing Goals 1969-1978. Assumptions: Market Interest Rates; I = 6%, II = 7.5%, III = 8.5% (Inc. FHA Insurance Premiums).
See Table 4 for other Assumptions

Year	No. of Units Constructed and Rehabilitated Under Both Programs	Necessary Annual Congressional Appropriation Both Programs			Cumulative Total of Appropriations		
		I (6%)	II (7.5%)	III (8.5%)	I (6%)	II (7.5%)	III (8.5%)
		(000 omitted)	(000,000 omitted)		(000 000 omitted)		
1968	---	---	---	---	---	---	---
1969	175	\$ 78.24	\$ 106.05	\$ 125.39	\$ 78.24	\$ 106.05	\$ 125.39
1970	210	173.51	235.16	277.85	251.74	341.22	403.24
1971	235	277.78	376.84	437.79	529.52	718.06	841.03
1972	265	396.40	538.23	617.97	925.92	1,256.28	1,458.99
1973	300	527.64	717.14	806.42	1,453.55	1,973.43	2,265.42
1974	425	697.36	948.98	1,054.51	2,150.92	2,922.39	3,319.92
1975	510	886.53	1,207.31	1,318.74	3,037.44	4,149.70	4,638.66
1976	510	1,130.17	1,526.04	1,659.60	4,157.61	5,655.74	6,298.26
1977	460	1,351.36	1,840.33	1,988.85	5,508.98	7,496.07	8,287.10
1978	---	1,538.49	2,090.95	2,111.90	7,047.47	9,587.02	10,499.01
1979	---	1,391.83	1,871.16	1,733.55	8,439.30	11,458.17	12,232.56
1980	---	1,234.99	1,639.72	1,248.80	9,674.29	13,097.89	13,481.35
1981	---	1,081.98	1,413.85	845.93	10,756.27	14,511.75	14,327.28
1982	---	922.92	1,179.46	476.70	11,679.19	15,691.22	14,803.99
1983	---	772.99	958.03	240.34	12,452.19	16,649.25	15,044.33
1984	---	618.88	734.45	77.27	13,071.06	17,383.76	15,121.60
1985	---	481.32	542.49	\$ 40.07	13,552.38	17,926.18	15,161.67
1986	---	345.51	363.80	---	13,897.89	18,289.98	---
1988	---	237.07	233.81	---	14,134.96	18,523.79	---
1989	---	140.37	129.26	---	14,275.34	18,653.04	---
1990	---	80.33	80.16	---	14,355.68	18,733.66	---
1991	---	\$ 37.80	36.78	---	\$14,393.48	18,770.43	---
1992	---	---	\$ 18.83	---	---	\$18,789.26	---
1993	---	---	---	---	---	---	---
1994	---	---	---	---	---	---	---
1995	---	---	---	---	---	---	---

Table 10

SECTION 235 AND 236 FHA MORTGAGE AT 7.5% "MOST LIKELY" PROGRAMS
ESTIMATED ANNUAL DWELLING UNIT COST AND DEMANDS FOR MORTGAGE CREDIT

Estimated Annual and Cumulative Dwelling Unit Cost Requiring Mortgage Financing For Both Sections 235 and 236 FHA Mortgage Insurance Programs. The Table Displays Both Annual Unit Cost and Demand For Mortgage Funds Under "Most Likely" Assumptions. *

Year	235				236				Cumulative Cost of all Programs (000 omitted)
	New		Rehabilitated		New		Rehabilitated		
	Unit Cost	Total Units	Unit Cost	Total Units	Unit Cost	Total Units	Unit Cost	Total Units	
1969	\$15,410.45	55,000	\$11,300.99	30,000	\$13,071.29	60,000	\$ 9,725.66	30,000	\$ 2,262,652
1970	16,168.13	70,000	11,851.92	40,000	13,721.42	65,000	10,228.28	35,000	5,117,795
1971	16,963.42	80,000	12,430.56	45,000	14,385.28	75,000	10,757.26	35,000	8,489,644
1972	17,798.22	80,000	13,038.35	45,000	15,091.48	95,000	11,313.99	45,000	12,443,047
1973	18,674.50	80,000	13,676.81	45,000	15,832.67	120,000	11,899.96	55,000	17,106,882
1974	19,594.36	80,000	14,347.54	45,000	16,610.61	170,000	12,516.72	80,000	23,145,210
1975	20,559.97	80,000	15,052.22	45,000	17,427.14	200,000	13,165.92	100,000	30,269,378
1976	21,573.65	100,000	15,792.66	60,000	18,284.20	220,000	13,849.28	130,000	39,177,230
1977	22,637.82	100,000	16,570.61	60,000	19,183.82	270,000	14,568.64	80,000	48,780,370
1978	\$23,755.02	100,000	\$17,388.16	60,000	\$20,128.13	220,000	\$15,325.91	80,000	\$57,853,423

* See Note - Table 4 Assumptions

At the "Optimistic" Interest rate (6%) the cumulative cost of all programs would be:

1969 - \$2,262,652,000; 1975 - \$29,893,975,000; 1978 - \$56,766,714,000.

At the "Pessimistic" Interest rate (8.5%) the cumulative cost of all programs would be:

1969 - \$2,262,652,000; 1975 - \$33,231,070,000; 1978 - \$66,919,357,000.



UNIVERSITY OF ILLINOIS-URBANA



3 0112 060296859